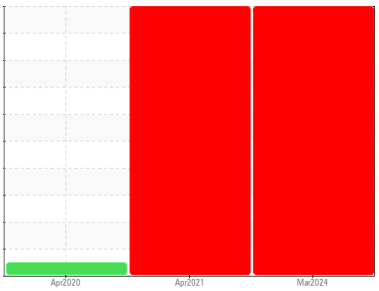
PROBLEM SUMMARY

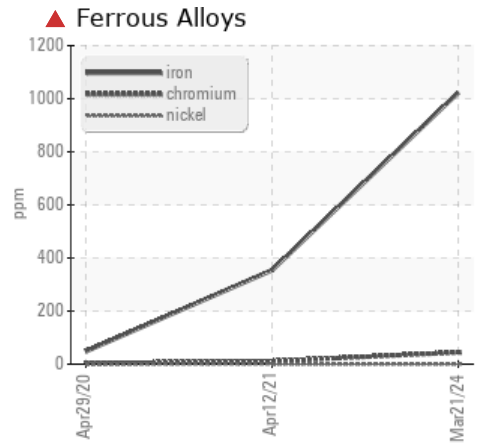
Area
ALTAIR 30 [418163]
Machine Id
ATLAS COPCO UTY758601 - ENGINEERED DEVICES
Component
Compressor

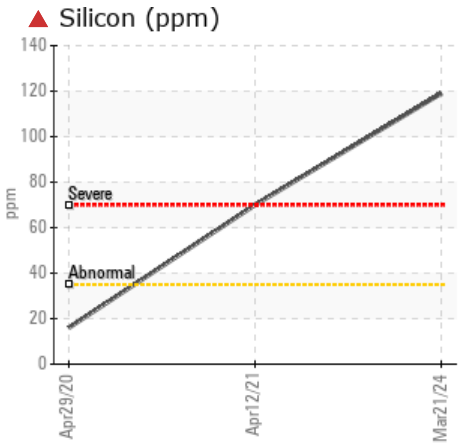
Sample Rating Trend

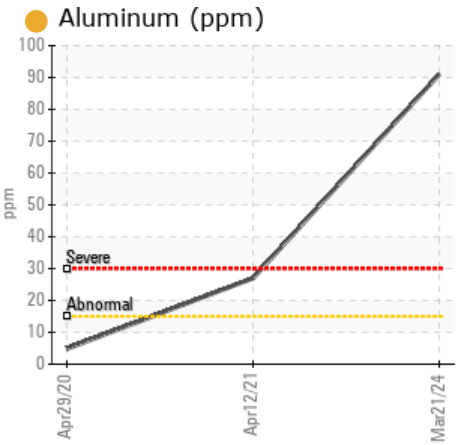


WEAR

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>50	▲ **1023**	▲ 354	48
Chromium	ppm	ASTM D5185m	>5	▲ **44**	▲ 11	3
Silicon	ppm	ASTM D5185m	>35	▲ **119**	▲ 70	16
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE

Customer Id: UCAIRCAR
Sample No.: UCH06125766
Lab Number: 06125766
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

12 Apr 2021 Diag: Jonathan Hester

WEAR

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. The chromium level is severe. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

29 Apr 2020 Diag: Doug Bogart

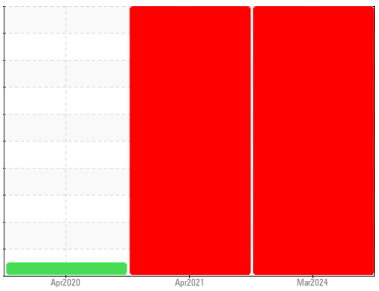
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
ALTAIR 30 [418163]
Machine Id
ATLAS COPCO UTY758601 - ENGINEERED DEVICES
Component
Compressor

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear

The iron level is severe. The chromium level is severe.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**UCH06125766**	UCH05228143	UCH04975418
Sample Date		Client Info		**21 Mar 2024**	12 Apr 2021	29 Apr 2020
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**SEVERE**	SEVERE	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	▲ **1023**	▲ 354	48
Chromium	ppm	ASTM D5185m	>5	▲ **44**	▲ 11	3
Nickel	ppm	ASTM D5185m		**<1**	<1	0
Titanium	ppm	ASTM D5185m		**3**	1	<1
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>15	● **91**	● 27	5
Lead	ppm	ASTM D5185m	>65	**0**	2	1
Copper	ppm	ASTM D5185m	>65	**3**	3	<1
Tin	ppm	ASTM D5185m	>10	**4**	0	0
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

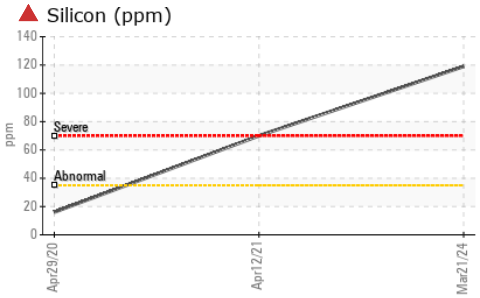
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	<1	0
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**9**	3	<1
Magnesium	ppm	ASTM D5185m		**14**	37	<1
Calcium	ppm	ASTM D5185m		**176**	250	15
Phosphorus	ppm	ASTM D5185m		**53**	105	42
Zinc	ppm	ASTM D5185m		**0**	69	6
Sulfur	ppm	ASTM D5185m		**299**	716	1066

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	▲ **119**	▲ 70	16
Sodium	ppm	ASTM D5185m		**26**	22	30
Potassium	ppm	ASTM D5185m	>20	**7**	16	<1
Water	%	ASTM D6304	>0.1	**NEG**	NEG	NEG

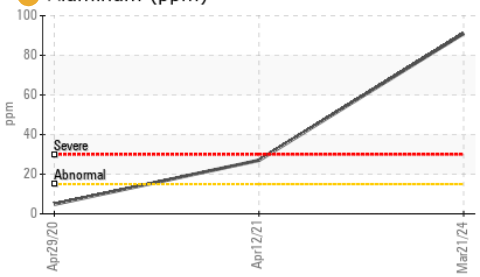
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.279**	0.061	0.076

OIL ANALYSIS REPORT

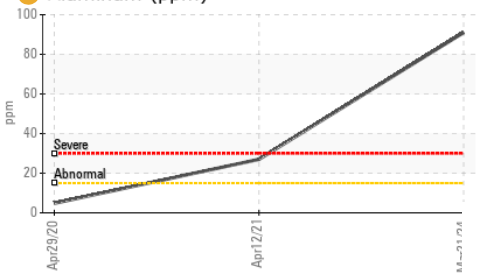
Silicon (ppm)



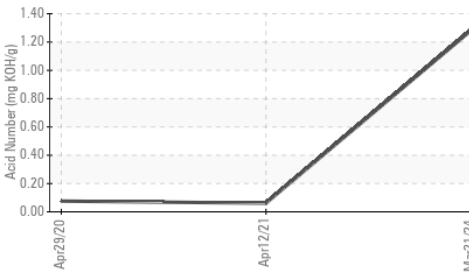
Aluminum (ppm)



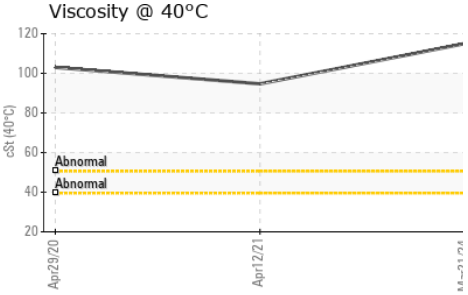
Aluminum (ppm)



Acid Number

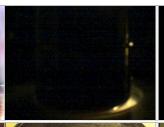
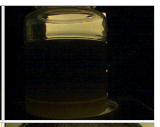
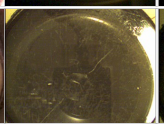


Viscosity @ 40°C



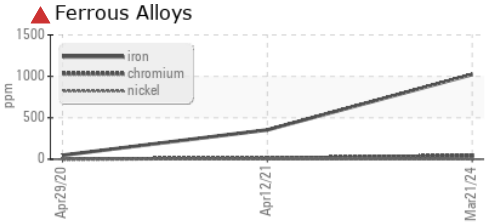
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**115**	94.7	103.0

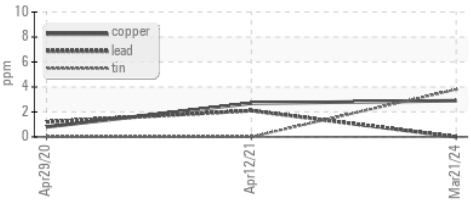
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

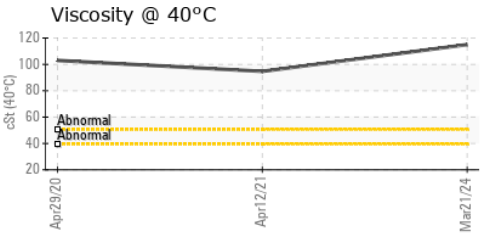
Ferrous Alloys



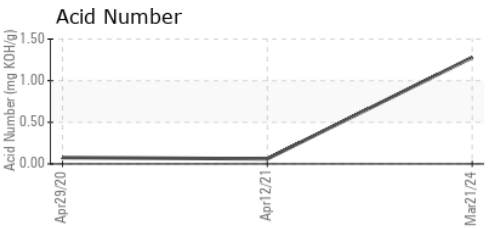
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCH06125766
Lab Number : 06125766
Unique Number : 10939917
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 21 Mar 2024
Tested : 26 Mar 2024
Diagnosed : 26 Mar 2024 - Jonathan Hester

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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